

# INTERNATIONAL SEARCH REPORT

Inter .pplication No  
PC1/US2004/037642

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/505 A61K31/519 A61P9/10 A61P19/02 A61P25/16  
A61P25/28 A61P37/00 A61P29/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 02/47690 A (CYTOVIA, INC) 20 June 2002 (2002-06-20)</p> <p>claims 1,2,13-,17,24,25,27,29,39 paragraphs '0001!, '0012! - '0015!, '0055! - '0057!, '0060!, '0065! - '0068! See compounds having registry numbers: 438247-48-4, 438247-49-5, 438247-50-8, 438247-51-9, 438247-54-2, 438247-57-5, 438247-74-6, 438247-91-7, 438247-92-8,</p> <p>See compounds having registry numbers: 438248-08-9, 438248-10-3, 438248-12-5, 438248-14-7, 438248-16-9, 438248-18-1, 300359-07-3, 331648-44-3, 331648-44-3, See compounds in table 1, N. 73, 75, 81, 46, 20</p> <p style="text-align: center;">----- -/--</p>	<p>1-7,12, 13, 15-19, 27,28,31</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

18 May 2005

Date of mailing of the international search report

02/06/2005

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

Intern Application No  
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 24 44 426 A1 (DELALANDE S.A) 27 March 1975 (1975-03-27)  See compounds in table 1 page 21, line 3 page 35, paragraph 1-3 page 21, line 9 - page 40, line 7	1-7, 12, 13, 15-19, 27
X	DE 27 29 360 A1 (DELALANDE S.A) 12 January 1978 (1978-01-12) See compounds of table 1. claim 10 page 21, lines 3-8 page 21, paragraph 2 - page 40, paragraph 2	1-7, 12, 13
X	----- DATABASE CA 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; YONETOKU, YASUHIRO ET AL: "Preparation of 4-aminopyrimidine derivatives as insulin secretion accelerators" XP002328217 retrieved from STN Database accession no. 2003:261678 abstract See compounds having RN: 504404-59-5, 504404-58-4, 504404-57-3, 504404-57-3, 378217-44-8, 504399-71-7, 504399-74-0, 504399-75-1, 504399-76-2, 504399-77-3, 504399-82-0, 504399-83-1, 504401-66-5, 504401-67-6, 504401-68-7, 504404-14-2 & WO 03/026661 A1 (YAMANOUCHI PHARMACEUTICAL CO., LTD., JAPAN) 3 April 2003 (2003-04-03)	1-7
P, X	----- WO 2004/032716 A (MASSACHUSETTS INSTITUTE OF TECHNOLOGY; CENTER FOR BLOOD RESEARCH, INC) 22 April 2004 (2004-04-22) sentence 12 See compound at page 23 "MIT9952-227" (RN: 330819-79-9). claims  ----- -/-	1-7, 17-19

## INTERNATIONAL SEARCH REPORT

Intern

Application No

PCT/US2004/037642

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE CA 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; TAKATANI, TAKAO ET AL: "Preparation of pyrimidine derivatives as drugs for treating disease and disorders of cerebral blood vessels" XP002328218 retrieved from STN Database accession no. 1988:570451 abstract See compounds having RN: 116904-43-9, 116904-44-0, 116904-54-2, 116904-55-3, 116904-56-4, 116904-26-8, 116904-27-9. & JP 63 107966 A2 (FUJISAWA PHARMACEUTICAL CO., LTD., JAPAN) 12 May 1988 (1988-05-12) -----	8
A	WO 02/42280 A (F. HOFFMANN-LA ROCHE AG) 30 May 2002 (2002-05-30) See compounds having registry number: 432521-18-1 and 432521-49-8 -----	9
A	US 5 849 758 A (KLEEMANN ET AL) 15 December 1998 (1998-12-15) the whole document -----	1-13

# INTERNATIONAL SEARCH REPORT

In international application No.  
PCT/US2004/037642

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
**Although claims 15-30 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.**
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Inten Application No  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0247690	A	20-06-2002	AU 2892202 A 24-06-2002
		EP 1351691 A1 15-10-2003	
		WO 0247690 A1 20-06-2002	
		US 2003069239 A1 10-04-2003	
		US 2004097503 A1 20-05-2004	
DE 2444426	A1	27-03-1975	FR 2244459 A1 18-04-1975
		FR 2265386 A2 24-10-1975	
		AU 7344174 A 25-03-1976	
		BE 819057 A1 21-02-1975	
		CA 1008074 A1 05-04-1977	
		CH 593266 A5 30-11-1977	
		ES 429869 A1 01-10-1976	
		GB 1430729 A 07-04-1976	
		IT 1062796 B 31-01-1985	
		JP 50088079 A 15-07-1975	
		LU 70791 A1 11-06-1975	
		NL 7412494 A 24-03-1975	
		SE 410600 B 22-10-1979	
		SE 7411806 A 21-03-1975	
		SU 645569 A3 30-01-1979	
		SU 698531 A3 15-11-1979	
		US 3978055 A 31-08-1976	
		US 4025514 A 24-05-1977	
		US 4041030 A 09-08-1977	
		ZA 7405741 A 29-10-1975	
DE 2729360	A1	12-01-1978	FR 2357252 A2 03-02-1978
		FR 2394543 A2 12-01-1979	
		AU 2680877 A 11-01-1979	
		BE 855867 A4 20-12-1977	
		CH 611283 A5 31-05-1979	
		ES 460411 A2 01-10-1978	
		GB 1548858 A 18-07-1979	
		GR 60840 A7 31-08-1978	
		IT 1114810 B 27-01-1986	
		JP 53012877 A 04-02-1978	
		LU 77660 A1 27-01-1978	
		NL 7707531 A 10-01-1978	
		SE 7707880 A 08-01-1978	
		SU 679143 A3 05-08-1979	
		US 4041030 A 09-08-1977	
		ZA 7703740 A 30-05-1978	
WO 03026661	A1	03-04-2003	NONE
WO 2004032716	A	22-04-2004	AU 2003288925 A1 04-05-2004
		WO 2004032716 A2 22-04-2004	
		US 2004171073 A1 02-09-2004	
JP 63107966	A2	12-05-1988	JP 63107966 A 12-05-1988
WO 0242280	A	30-05-2002	AU 2792102 A 03-06-2002
		BG 107840 A 30-01-2004	
		BR 0115480 A 21-10-2003	
		CA 2429570 A1 30-05-2002	
		CZ 20031666 A3 18-02-2004	
		WO 0242280 A2 30-05-2002	

## INTERNATIONAL SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0242280 A		EP 1339698 A2	03-09-2003
		HU 0303045 A2	29-12-2003
		JP 2004514673 T	20-05-2004
		MX PA03004453 A	19-08-2003
		NO 20032291 A	21-05-2003
		NZ 525555 A	29-10-2004
		PL 366394 A1	24-01-2005
		SK 7612003 A3	04-05-2004
		US 2002099207 A1	25-07-2002
		ZA 200303517 A	10-08-2004
US 5849758 A	15-12-1998	AU 730571 B2	08-03-2001
		AU 3319897 A	12-02-1998
		BR 9704282 A	29-12-1998
		CA 2212310 A1	07-02-1998
		CN 1175578 A ,C	11-03-1998
		CZ 9702481 A3	17-06-1998
		EP 0823431 A1	11-02-1998
		HU 9701361 A2	29-06-1998
		IL 121492 A	10-02-2002
		JP 10114745 A	06-05-1998
		SG 55357 A1	21-12-1998
		SK 107797 A3	05-08-1998
		ZA 9707009 A	08-02-1999
		US 6008161 A	28-12-1999
		US 6066597 A	23-05-2000
		US 5824624 A	20-10-1998